

Davenport

1654

Changes Corrected by the STIC System Branch

CRF Processing Date: 2/14/2000

Edited by: _____
Verified by: _____ (STIC staff)

Serial Number: 09/003,869A

- 101- (S)
- ☐ Changed a file from non-ASCII to ASCII
 - ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
 - ☐ Edited a format error in the Current Application Data section, specifically:
ENTERED
 - ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
 - ☐ Added the mandatory heading and subheadings for "Current Application Data".
 - ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
 - ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
 - ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
 - ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
 - ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
 - ☐ Inserted colons after headings/subheadings. Headings edited included: _____
 - ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
 - ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
 - ☐ Inserted mandatory headings, specifically: _____
 - ☐ Corrected an obvious error in the response, specifically: _____
 - ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
 - ☐ Corrected an error in the Number of Sequences field, specifically: _____
 - ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
 - ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
 - ☒ Other: seq 4 - inserted hard returns at end of line

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*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form. 3/1/95

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/003,869A

DATE: 02/15/2000
TIME: 11:19:27

Input Set: I003869A.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

1 <110> APPLICANT: BEELEY, NIGEL ROBERT ARNOLD
2 PRICKETT, KATHRYN S.
3 BHAVSAR, SUNIL
4 <120> TITLE OF INVENTION: USE OF EXENDINS AND AGONISTS THEREOF FOR
5 THE REDUCTION OF FOOD INTAKE
6 <130> FILE REFERENCE: 231/181
7 <140> CURRENT APPLICATION NUMBER: US/09/003,869A
8 <141> CURRENT FILING DATE: 1998-01-07
9 <150> EARLIER APPLICATION NUMBER: US 60/034,905
10 <151> EARLIER FILING DATE: 1997-01-07
11 <150> EARLIER APPLICATION NUMBER: US 60/055,404
12 <151> EARLIER FILING DATE: 1997-08-08
13 <150> EARLIER APPLICATION NUMBER: US 60/065,442
14 <151> EARLIER FILING DATE: 1997-11-14
15 <150> EARLIER APPLICATION NUMBER: US 60/066,029
16 <151> EARLIER FILING DATE: 1997-11-14
17 <160> NUMBER OF SEQ ID NOS: 188
18 <170> SOFTWARE: FastSEQ for Windows Version 3.0
19 <210> SEQ ID NO 1
20 <211> LENGTH: 39
21 <212> TYPE: PRT
22 <213> ORGANISM: Heloderma horridum
23 <220> FEATURE:
24 <221> NAME/KEY: AMIDATION
25 <222> LOCATION: (39)...(39)
26 <223> OTHER INFORMATION: amidated Ser (Serinamide)
27 <400> SEQUENCE: 1
28 His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
29 1 5 10 15
30 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
31 20 25 30
32 Ser Gly Ala Pro Pro Pro Ser
33 35
34 <210> SEQ ID NO 2
35 <211> LENGTH: 39
36 <212> TYPE: PRT
37 <213> ORGANISM: Heloderma suspectum
38 <220> FEATURE:
39 <221> NAME/KEY: AMIDATION
40 <222> LOCATION: (39)...(39)
41 <223> OTHER INFORMATION: amidated Ser (Serinamide)
42 <400> SEQUENCE: 2
43 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
44 1 5 10 15

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DATE: 02/15/2000
TIME: 11:19:27

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45      Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
46              20                      25                      30
47      Ser Gly Ala Pro Pro Pro Ser
48              35
49 <210> SEQ ID NO 3
50 <211> LENGTH: 39
51 <212> TYPE: PRT
52 <213> ORGANISM: Artificial Sequence
53 <220> FEATURE:
54 <223> OTHER INFORMATION: artificially synthesized sequence of novel exendin agonist
55      compound
56 <220> FEATURE:
57 <221> NAME/KEY: VARIANT
58 <222> LOCATION: (1)...(8)
59 <223> OTHER INFORMATION: Xaa in position 1 is His, Arg or Tyr; Xaa in position 2 is
60      Ser, Gly, Ala or Thr; Xaa in position 3 is Asp or Glu;
61      Xaa in position 6 is Phe, Tyr or naphthylalanine; Xaa in
62      position 7 is Thr or Ser; Xaa in position 8 is Ser or Thr;
63 <220> FEATURE:
64 <221> NAME/KEY: VARIANT
65 <222> LOCATION: (9)...(22)
66 <223> OTHER INFORMATION: Xaa in position 9 is Asp or Glu; Xaa in position 10 is Leu
67      Val, pentylglycine or Met; Xaa in position 14 is Leu, Ile,
68      pentylglycine, Val or Met; Xaa in position 22 is Phe, Tyr or
69      naphthylalanine;
70 <220> FEATURE:
71 <221> NAME/KEY: VARIANT
72 <222> LOCATION: (23)...(25)
73 <223> OTHER INFORMATION: Xaa in position 23 is Ile, Val, Leu, pentylglycine, tert-
74      butylglycine or Met; Xaa in position 24 is Glu or Asp;
75      Xaa in position 25 is Trp, Phe, Tyr, or naphthylalanine;
76 <220> FEATURE:
77 <221> NAME/KEY: VARIANT
78 <222> LOCATION: (31)...(39)
79 <223> OTHER INFORMATION: Xaa in positions 31, 36, 37 and 38 are independently Pro,
80      homoproline, 3-hydroxyproline, 4-hydroxyproline, thioproline,
81      N-alkylglycine, N-alkylpentylglycine or N-alkylalanine;
82      Xaa in position 39 is Ser, Thr or Tyr;
83 <220> FEATURE:
84 <221> NAME/KEY: VARIANT
85 <222> LOCATION: (1)...(39)
86 <223> OTHER INFORMATION: with the proviso that the compound is not exendin-3
87      or exendin-4.
88 <220> FEATURE:
89 <221> NAME/KEY: AMIDATION
90 <222> LOCATION: (39)...(39)
91 <223> OTHER INFORMATION: The terminal amino acid may or may not be amidated.
92 <400> SEQUENCE: 3
93      Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
94      1          5          10          15

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Input Set: I003869A.RAW

W--> 95 Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Lys Asn Gly Gly Xaa Ser
96 20 25 30
W--> 97 Ser Gly Ala Xaa Xaa Xaa Xaa
98 35

99 <210> SEQ ID NO 4
100 <211> LENGTH: 38
101 <212> TYPE: PRT
102 <213> ORGANISM: Artificial Sequence
103 <220> FEATURE:
104 <223> OTHER INFORMATION: artificially synthesized sequence of novel exendin agonist
105 compound
106 <220> FEATURE:
107 <221> NAME/KEY: VARIANT
108 <222> LOCATION: (1)...(7)
109 <223> OTHER INFORMATION: Xaa in position 1 is His, Arg or Tyr; Xaa in position 2 is
110 Ser, Gly, Ala or Thr; Xaa in position 3 is Asp or Glu;
111 Xaa in position 5 is Ala or Thr; Xaa in position 6 is Ala,
112 Phe, Tyr or naphthylalanine; Xaa in position 7 is Thr or Ser;
113 <220> FEATURE:
114 <221> NAME/KEY: VARIANT
115 <222> LOCATION: (8)...(13)
116 <223> OTHER INFORMATION: Xaa in position 8 is Ala, Ser or Thr; Xaa in position 9 is
117 Asp or Glu; Xaa in position 10 is Ala, Leu, Ile, Val, pentyl-
118 glycine or Met; Xaa in position 11 is Ala or Ser; Xaa in
119 position 12 is Ala or Lys; Xaa in position 13 is Ala or Gln;
120 <220> FEATURE:
121 <221> NAME/KEY: VARIANT
122 <222> LOCATION: (14)...(20)
123 <223> OTHER INFORMATION: Xaa in position 14 is Ala, Leu, Ile, pentylglycine, Val or
124 Met; Xaa in position 15 is Ala or Glu; Xaa in position 16 is
125 Ala or Glu; Xaa in position 17 is Ala or Glu; Xaa in position
126 19 is Ala or Val; Xaa in position 20 is Ala or Arg;
127 <220> FEATURE:
128 <221> NAME/KEY: VARIANT
129 <222> LOCATION: (21)...(24)
130 <223> OTHER INFORMATION: Xaa in position 21 is Ala or Leu; Xaa in position 22 is Al
131 Phe, Tyr or naphthylalanine; Xaa in position 23 is Ile, Val,
132 Leu, pentylglycine, tert-butylglycine or Met; Xaa in position
133 24 is Ala, Glu or Asp;
134 <220> FEATURE:
135 <221> NAME/KEY: VARIANT
136 <222> LOCATION: (25)...(27)
137 <223> OTHER INFORMATION: Xaa in position 25 is Ala, Trp, Phe, Tyr or naphthylalanin
138 Xaa in position 26 is Ala or Leu; Xaa in position 27 is Ala
139 or Lys;
140 <220> FEATURE:
141 <221> NAME/KEY: VARIANT
142 <222> LOCATION: (28)...(28)
143 <223> OTHER INFORMATION: Xaa in position 28 is Ala or Asn;
144 <220> FEATURE:

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/003,869ADATE: 02/15/2000
TIME: 11:19:27

Input Set: I003869A.RAW

145 <221> NAME/KEY: VARIANT
146 <222> LOCATION: (29)...(30)
147 <223> OTHER INFORMATION: Xaa in position 29 is Gly or amino acid is missing;
148 Xaa in position 30 is Gly or amino acid is missing;
149 <220> FEATURE:
150 <221> NAME/KEY: VARIANT
151 <222> LOCATION: (31)...(32)
152 <223> OTHER INFORMATION: Xaa in position 31 is Pro, homoproline, 3Hyp, 4Hyp,
153 thioproline, N-alkylglycine, N-alkylpentylglycine,
154 N-alkylalanine, or amino acid is missing; Xaa in position
155 32 is Ser or amino acid is missing;
156 <220> FEATURE:
157 <221> NAME/KEY: VARIANT
158 <222> LOCATION: (33)...(35)
159 <223> OTHER INFORMATION: Xaa in position 33 is Ser or amino acid is missing;
160 Xaa in position 34 is Gly or amino acid is missing;
161 Xaa in position 35 is Ala or amino acid is missing;
162 <220> FEATURE:
163 <221> NAME/KEY: VARIANT
164 <222> LOCATION: (36)...(36)
165 <223> OTHER INFORMATION: Xaa in position 36 is Pro, homoproline, 3Hyp, 4Hyp,
166 thioproline, N-alkylglycine, N-alkylpentylglycine,
167 N-alkylalanine, or amino acid is missing;
168 <220> FEATURE:
169 <221> NAME/KEY: VARIANT
170 <222> LOCATION: (37)...(37)
171 <223> OTHER INFORMATION: Xaa in position 37 is Pro, homoproline, 3Hyp, 4Hyp,
172 thioproline, N-alkylglycine, N-alkylpentylglycine,
173 N-alkylalanine, or amino acid is missing;
174 <220> FEATURE:
175 <221> NAME/KEY: VARIANT
176 <222> LOCATION: (38)...(38)
177 <223> OTHER INFORMATION: Xaa in position 38 is Pro, homoproline, 3Hyp, 4Hyp,
178 thioproline, N-alkylglycine, N-alkylpentylglycine,
179 N-alkylalanine, or amino acid is missing;
180 <220> FEATURE:
181 <221> NAME/KEY: AMIDATION
182 <222> LOCATION: (28)...(28)
183 <223> OTHER INFORMATION: When Xaa in position 28 is terminal amino acid in sequence
184 terminal amino acid may or may not be amidated;
185 <220> FEATURE:
186 <221> NAME/KEY: AMIDATION
187 <222> LOCATION: (29)...(29)
188 <223> OTHER INFORMATION: When Gly in position 29 is terminal amino acid in sequence
189 terminal amino acid may or may not be amidated;
190 <220> FEATURE:
191 <221> NAME/KEY: AMIDATION
192 <222> LOCATION: (30)...(30)
193 <223> OTHER INFORMATION: When Gly in position 30 is terminal amino acid in sequence
194 terminal amino acid may or may not be amidated;

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/003,869ADATE: 02/15/2000
TIME: 11:19:27

Input Set: I003869A.RAW

195 <220> FEATURE:
196 <221> NAME/KEY: AMIDATION
197 <222> LOCATION: (31)...(31)
198 <223> OTHER INFORMATION: When Xaa in position 31 is terminal amino acid in sequence
199 terminal amino acid may or may not be amidated;
200 <220> FEATURE:
201 <221> NAME/KEY: AMIDATION
202 <222> LOCATION: (32)...(32)
203 <223> OTHER INFORMATION: When Ser in position 32 is terminal amino acid in sequence
204 terminal amino acid may or may not be amidated;
205 <220> FEATURE:
206 <221> NAME/KEY: AMIDATION
207 <222> LOCATION: (33)...(33)
208 <223> OTHER INFORMATION: When Ser in position 33 is terminal amino acid in sequence
209 terminal amino acid may or may not be amidated;
210 <220> FEATURE:
211 <221> NAME/KEY: AMIDATION
212 <222> LOCATION: (34)...(34)
213 <223> OTHER INFORMATION: When Gly in position 34 is terminal amino acid in sequence
214 terminal amino acid may or may not be amidated;
215 <220> FEATURE:
216 <221> NAME/KEY: AMIDATION
217 <222> LOCATION: (35)...(35)
218 <223> OTHER INFORMATION: When Ala in position 35 is terminal amino acid in sequence
219 terminal amino acid may or may not be amidated;
220 <220> FEATURE:
221 <221> NAME/KEY: AMIDATION
222 <222> LOCATION: (36)...(36)
223 <223> OTHER INFORMATION: When Xaa in position 36 is terminal amino acid in sequence
224 terminal amino acid may or may not be amidated;
225 <220> FEATURE:
226 <221> NAME/KEY: AMIDATION
227 <222> LOCATION: (37)...(37)
228 <223> OTHER INFORMATION: When Xaa in position 37 is terminal amino acid in sequence
229 terminal amino acid may or may not be amidated;
230 <220> FEATURE:
231 <221> NAME/KEY: AMIDATION
232 <222> LOCATION: (38)...(38)
233 <223> OTHER INFORMATION: When Xaa in position 38 is terminal amino acid in sequence
234 terminal amino acid may or may not be amidated;
235 <220> FEATURE:
236 <221> NAME/KEY: VARIANT
237 <222> LOCATION: (5)...(28)
238 <223> OTHER INFORMATION: provided that no more than three of Xaa in positions 5, 6,
239 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 24, 25, 26,
240 27 and 28 are Ala.
241 <400> SEQUENCE: 4
W--> 242 Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
OK 243 1 5 10 15
W--> 244 Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

✓ FYI

Line	?	Error/Warning	Original Text
93	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa S
95	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu L
97	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa Xaa
242	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa X
244	W	"N" or "Xaa" used: Feature required	Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
246	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa
408	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
410	W	"N" or "Xaa" used: Feature required	Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
412	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa
584	W	"N" or "Xaa" used: Feature required	His Gly Glu Gly Thr Xaa Thr Ser Asp Leu S
676	W	"N" or "Xaa" used: Feature required	His Gly Glu Gly Thr Phe Thr Ser Asp Xaa S
696	W	"N" or "Xaa" used: Feature required	His Gly Glu Gly Thr Phe Thr Ser Asp Xaa S
716	W	"N" or "Xaa" used: Feature required	His Gly Glu Gly Thr Phe Thr Ser Asp Leu S
736	W	"N" or "Xaa" used: Feature required	His Gly Glu Gly Thr Phe Thr Ser Asp Leu S
758	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu L
814	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu L
834	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu L
890	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
892	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa Ser
912	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa Ser
930	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
932	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa Ser
952	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa Ser
970	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Phe Leu L
972	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa Ser
990	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Phe Leu
992	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa Ser
1010	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
1012	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa Ser
1032	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa Ser
1050	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Phe Leu L
1052	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa Ser
1746	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
1748	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa
1768	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa
1786	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
1806	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
1808	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa
1826	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
1828	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa
1846	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
1848	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa
1898	W	"N" or "Xaa" used: Feature required	His Gly Glu Gly Thr Xaa Thr Ser Asp Leu S
1964	W	"N" or "Xaa" used: Feature required	His Gly Glu Gly Thr Phe Thr Ser Asp Xaa S
1984	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu L
2002	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu L
2069	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
2071	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa
2324	W	"N" or "Xaa" used: Feature required	Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu S
2342	W	"N" or "Xaa" used: Feature required	Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu S

Input Set: I003869A.RAW

Line	?	Error/Warning	Original Text
2520	W	"N" or "Xaa" used: Feature required	Ala Gly Asp Gly Thr Phe Thr Ser Asp Xaa S
2538	W	"N" or "Xaa" used: Feature required	Ala Gly Asp Gly Thr Phe Thr Ser Asp Xaa S
2684	W	"N" or "Xaa" used: Feature required	Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu S
2702	W	"N" or "Xaa" used: Feature required	Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu S
2914	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu L
2932	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu L
2982	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu L
3000	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu L
3418	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
3420	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa
3440	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa Xaa
3458	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
3460	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa Xaa
3478	W	"N" or "Xaa" used: Feature required	Glu Ala Val Arg Leu Phe Ile Glu Trp Leu L
3480	W	"N" or "Xaa" used: Feature required	Ser Gly Ala Xaa

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/003,869A

DATE: 02/15/2000
TIME: 11:19:27

Input Set: I003869A.RAW

PREVIOUSLY ERRORED SEQUENCES-EDITED

```
W--> 1 <210> 4
W--> 2 <211> 38
W--> 3 <212> PRT
W--> 4 <213> Artificial Sequence
W--> 5 <220>
W--> 6 <223> artificially synthesized sequence of novel exendin agonist
W--> 7 compound
W--> 8 <220>
W--> 9 <221> VARIANT
W--> 10 <222> (1)...(7)
W--> 11 <223> Xaa in position 1 is His, Arg or Tyr; Xaa in position 2 is
W--> 12 Ser, Gly, Ala or Thr; Xaa in position 3 is Asp or Glu;
W--> 13 Xaa in position 5 is Ala or Thr; Xaa in position 6 is Ala,
W--> 14 Phe, Tyr or naphthylalanine; Xaa in position 7 is Thr or Ser;
W--> 15 <220>
W--> 16 <221> VARIANT
W--> 17 <222> (8)...(13)
W--> 18 <223> Xaa in position 8 is Ala, Ser or Thr; Xaa in position 9 is
W--> 19 Asp or Glu; Xaa in position 10 is Ala, Leu, Ile, Val, pentyl-
W--> 20 glycine or Met; Xaa in position 11 is Ala or Ser; Xaa in
W--> 21 position 12 is Ala or Lys; Xaa in position 13 is Ala or Gln;
W--> 22 <220>
W--> 23 <221> VARIANT
W--> 24 <222> (14)...(20)
W--> 25 <223> Xaa in position 14 is Ala, Leu, Ile, pentylglycine, Val or
W--> 26 Met; Xaa in position 15 is Ala or Glu; Xaa in position 16 is
W--> 27 Ala or Glu; Xaa in position 17 is Ala or Glu; Xaa in position
W--> 28 19 is Ala or Val; Xaa in position 20 is Ala or Arg;
W--> 29 <220>
W--> 30 <221> VARIANT
W--> 31 <222> (21)...(24)
W--> 32 <223> Xaa in position 21 is Ala or Leu; Xaa in position 22 is Ala,
W--> 33 Phe, Tyr or naphthylalanine; Xaa in position 23 is Ile, Val,
W--> 34 Leu, pentylglycine, tert-butylglycine or Met; Xaa in position
W--> 35 24 is Ala, Glu or Asp;
W--> 36 <220>
W--> 37 <221> VARIANT
W--> 38 <222> (25)...(27)
W--> 39 <223> Xaa in position 25 is Ala, Trp, Phe, Tyr or naphthylalanine;
W--> 40 Xaa in position 26 is Ala or Leu; Xaa in position 27 is Ala
W--> 41 or Lys;
W--> 42 <220>
W--> 43 <221> VARIANT
W--> 44 <222> (28)...(28)
W--> 45 <223> Xaa in position 28 is Ala or Asn;
W--> 46 <220>
W--> 47 <221> VARIANT
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W--> 48 <222> (29)...
W--> 49 <223> Xaa in position 29 is Gly or amino acid is missing;
W--> 50 Xaa in position 30 is Gly or amino acid is missing;

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/003,869A

DATE: 02/15/2000
TIME: 11:19:27

Input Set: I003869A.RAW

W--> 51 <220>
W--> 52 <221> VARIANT
W--> 53 <222> (31)...(32)
W--> 54 <223> Xaa in position 31 is Pro, homoproline, 3Hyp, 4Hyp,
W--> 55 thioproline, N-alkylglycine, N-alkylpentylglycine,
W--> 56 N-alkylalanine, or amino acid is missing; Xaa in position
W--> 57 32 is Ser or amino acid is missing;
W--> 58 <220>
W--> 59 <221> VARIANT
W--> 60 <222> (33)...(35)
W--> 61 <223> Xaa in position 33 is Ser or amino acid is missing;
W--> 62 Xaa in position 34 is Gly or amino acid is missing;
W--> 63 Xaa in position 35 is Ala or amino acid is missing;
W--> 64 <220>
W--> 65 <221> VARIANT
W--> 66 <222> (36)...(36)
W--> 67 <223> Xaa in position 36 is Pro, homoproline, 3Hyp, 4Hyp,
W--> 68 thioproline, N-alkylglycine, N-alkylpentylglycine,
W--> 69 N-alkylalanine, or amino acid is missing;
W--> 70 <220>
W--> 71 <221> VARIANT
W--> 72 <222> (37)...(37)
W--> 73 <223> Xaa in position 37 is Pro, homoproline, 3Hyp, 4Hyp,
W--> 74 thioproline, N-alkylglycine, N-alkylpentylglycine,
W--> 75 N-alkylalanine, or amino acid is missing;
W--> 76 <220>
W--> 77 <221> VARIANT
W--> 78 <222> (38)...(38)
W--> 79 <223> Xaa in position 38 is Pro, homoproline, 3Hyp, 4Hyp,
W--> 80 thioproline, N-alkylglycine, N-alkylpentylglycine,
W--> 81 N-alkylalanine, or amino acid is missing;
W--> 82 <220>
W--> 83 <221> AMIDATION
W--> 84 <222> (28)...(28)
W--> 85 <223> When Xaa in position 28 is terminal amino acid in sequence,
W--> 86 terminal amino acid may or may not be amidated;
W--> 87 <220>
W--> 88 <221> AMIDATION
W--> 89 <222> (29)...(29)
W--> 90 <223> When Gly in position 29 is terminal amino acid in sequence,
W--> 91 terminal amino acid may or may not be amidated;
W--> 92 <220>
W--> 93 <221> AMIDATION
W--> 94 <222> (30)...(30)
W--> 95 <223> When Gly in position 30 is terminal amino acid in sequence,
W--> 96 terminal amino acid may or may not be amidated;
W--> 97 <220>
W--> 98 <221> AMIDATION
W--> 99 <222> (31)...(31)
W--> 100 <223> When Xaa in position 31 is terminal amino acid in sequence,

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W--> 101 terminal amino acid may or may not be amidated;
W--> 102 <220>
W--> 103 <221> AMIDATION
W--> 104 <222> (32)...(32)
W--> 105 <223> When Ser in position 32 is terminal amino acid in sequence,
W--> 106 terminal amino acid may or may not be amidated;
W--> 107 <220>
W--> 108 <221> AMIDATION
W--> 109 <222> (33)...(33)
W--> 110 <223> When Ser in position 33 is terminal amino acid in sequence,
W--> 111 terminal amino acid may or may not be amidated;
W--> 112 <220>
W--> 113 <221> AMIDATION
W--> 114 <222> (34)...(34)
W--> 115 <223> When Gly in position 34 is terminal amino acid in sequence,
W--> 116 terminal amino acid may or may not be amidated;
W--> 117 <220>
W--> 118 <221> AMIDATION
W--> 119 <222> (35)...(35)
W--> 120 <223> When Ala in position 35 is terminal amino acid in sequence,
W--> 121 terminal amino acid may or may not be amidated;
W--> 122 <220>
W--> 123 <221> AMIDATION
W--> 124 <222> (36)...(36)
W--> 125 <223> When Xaa in position 36 is terminal amino acid in sequence,
W--> 126 terminal amino acid may or may not be amidated;
W--> 127 <220>
W--> 128 <221> AMIDATION
W--> 129 <222> (37)...(37)
W--> 130 <223> When Xaa in position 37 is terminal amino acid in sequence,
W--> 131 terminal amino acid may or may not be amidated;
W--> 132 <220>
W--> 133 <221> AMIDATION
W--> 134 <222> (38)...(38)
W--> 135 <223> When Xaa in position 38 is terminal amino acid in sequence,
W--> 136 terminal amino acid may or may not be amidated;
W--> 137 <220>
W--> 138 <221> VARIANT
W--> 139 <222> (5)...(28)
W--> 140 <223> provided that no more than three of Xaa in positions 5, 6,
W--> 141 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 24, 25, 26,
W--> 142 27 and 28 are Ala.
W--> 143 <400> 4
W--> 144 Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
W--> 145 1 5 10 15
W--> 146 Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
W--> 147 20 25 30
W--> 148 Xaa Xaa Xaa Xaa Xaa Xaa
W--> 149 35

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RAW SEQUENCE LISTING
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This Raw Listing contains the General
Information Section and those Sequences
containing ERRORS.

Does Not Comply
Corrected Diskette Needed

1 <110> BEELEY, NIGEL ROBERT ARNOLD
2 PRICKETT, KATHRYN S.
3 BHAVSAR, SUNIL
4 <120> USE OF EXENDINS AND AGONISTS THEREOF FOR
5 THE REDUCTION OF FOOD INTAKE
6 <130> 231/181
7 <140> US/09/003,869A
8 <141> 1998-01-07
9 <150> US 60/034,905
10 <151> 1997-01-07
11 <150> US 60/055,404
12 <151> 1997-08-08
13 <150> US 60/065,442
14 <151> 1997-11-14
15 <150> US 60/066,029
16 <151> 1997-11-14
17 <160> 188
18 <170> FastSEQ for Windows Version 3.0

ERRORED SEQUENCES FOLLOW

19 <210> 4
20 <211> 38
21 <212> PRT
22 <213> Artificial Sequence
23 <220>
24 <223> artificially synthesized sequence of novel exendin agonist
25 compound
26 <220>
27 <221> VARIANT
28 <222> (1)...(7)
29 <223> Xaa in position 1 is His, Arg or Tyr; Xaa in position 2 is
30 Ser, Gly, Ala or Thr; Xaa in position 3 is Asp or Glu;
31 Xaa in position 5 is Ala or Thr; Xaa in position 6 is Ala,
32 Phe, Tyr or naphthylalanine; Xaa in position 7 is Thr or Ser;
33 <220>
34 <221> VARIANT
35 <222> (8)...(13)
36 <223> Xaa in position 8 is Ala, Ser or Thr; Xaa in position 9 is
37 Asp or Glu; Xaa in position 10 is Ala, Leu, Ile, Val, pentyl-
38 glycine or Met; Xaa in position 11 is Ala or Ser; Xaa in
39 position 12 is Ala or Lys; Xaa in position 13 is Ala or Gln;

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40 <220>
41 <221> VARIANT
42 <222> (14)...(20)
43 <223> Xaa in position 14 is Ala, Leu, Ile, pentylglycine, Val or
44 Met; Xaa in position 15 is Ala or Glu; Xaa in position 16 is
45 Ala or Glu; Xaa in position 17 is Ala or Glu; Xaa in position
46 19 is Ala or Val; Xaa in position 20 is Ala or Arg;
47 <220>
48 <221> VARIANT
49 <222> (21)...(24)
50 <223> Xaa in position 21 is Ala or Leu; Xaa in position 22 is Ala,
51 Phe, Tyr or naphthylalanine; Xaa in position 23 is Ile, Val,
52 Leu, pentylglycine, tert-butylglycine or Met; Xaa in position
53 24 is Ala, Glu or Asp;
54 <220>
55 <221> VARIANT
56 <222> (25)...(27)
57 <223> Xaa in position 25 is Ala, Trp, Phe, Tyr or naphthylalanine;
58 Xaa in position 26 is Ala or Leu; Xaa in position 27 is Ala
59 or Lys;
60 <220>
61 <221> VARIANT
62 <222> (28)...(28)
63 <223> Xaa in position 28 is Ala or Asn;
64 <220>
65 <221> VARIANT
66 <222> (29)...(30)
67 <223> Xaa in position 29 is Gly or amino acid is missing;
68 Xaa in position 30 is Gly or amino acid is missing;
69 <220>
70 <221> VARIANT
71 <222> (31)...(32)
72 <223> Xaa in position 31 is Pro, homoproline, 3Hyp, 4Hyp,
73 thioproline, N-alkylglycine, N-alkylpentylglycine,
74 N-alkylalanine, or amino acid is missing; Xaa in position
75 32 is Ser or amino acid is missing;
76 <220>
77 <221> VARIANT
78 <222> (33)...(35)
79 <223> Xaa in position 33 is Ser or amino acid is missing;
80 Xaa in position 34 is Gly or amino acid is missing;
81 Xaa in position 35 is Ala or amino acid is missing;
82 <220>
83 <221> VARIANT
84 <222> (36)...(36)
85 <223> Xaa in position 36 is Pro, homoproline, 3Hyp, 4Hyp,
86 thioproline, N-alkylglycine, N-alkylpentylglycine,
87 N-alkylalanine, or amino acid is missing;
88 <220>
89 <221> VARIANT

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90 <222> (37)...(37)
91 <223> Xaa in position 37 is Pro, homoproline, 3Hyp, 4Hyp,
92 thioproline, N-alkylglycine, N-alkylpentylglycine,
93 N-alkylalanine, or amino acid is missing;
94 <220>
95 <221> VARIANT
96 <222> (38)...(38)
97 <223> Xaa in position 38 is Pro, homoproline, 3Hyp, 4Hyp,
98 thioproline, N-alkylglycine, N-alkylpentylglycine,
99 N-alkylalanine, or amino acid is missing;
100 <220>
101 <221> AMIDATION
102 <222> (28)...(28)
103 <223> When Xaa in position 28 is terminal amino acid in sequence,
104 terminal amino acid may or may not be amidated;
105 <220>
106 <221> AMIDATION
107 <222> (29)...(29)
108 <223> When Gly in position 29 is terminal amino acid in sequence,
109 terminal amino acid may or may not be amidated;
110 <220>
111 <221> AMIDATION
112 <222> (30)...(30)
113 <223> When Gly in position 30 is terminal amino acid in sequence,
114 terminal amino acid may or may not be amidated;
115 <220>
116 <221> AMIDATION
117 <222> (31)...(31)
118 <223> When Xaa in position 31 is terminal amino acid in sequence,
119 terminal amino acid may or may not be amidated;
120 <220>
121 <221> AMIDATION
122 <222> (32)...(32)
123 <223> When Ser in position 32 is terminal amino acid in sequence,
124 terminal amino acid may or may not be amidated;
125 <220>
126 <221> AMIDATION
127 <222> (33)...(33)
128 <223> When Ser in position 33 is terminal amino acid in sequence,
129 terminal amino acid may or may not be amidated;
130 <220>
131 <221> AMIDATION
132 <222> (34)...(34)
133 <223> When Gly in position 34 is terminal amino acid in sequence,
134 terminal amino acid may or may not be amidated;
135 <220>
136 <221> AMIDATION
137 <222> (35)...(35)
138 <223> When Ala in position 35 is terminal amino acid in sequence,
139 terminal amino acid may or may not be amidated;

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RAW SEQUENCE LISTING
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140 <220>
141 <221> AMIDATION
142 <222> (36)...(36)
143 <223> When Xaa in position 36 is terminal amino acid in sequence,
144 terminal amino acid may or may not be amidated;
145 <220>
146 <221> AMIDATION
147 <222> (37)...(37)
148 <223> When Xaa in position 37 is terminal amino acid in sequence,
149 terminal amino acid may or may not be amidated;
150 <220>
151 <221> AMIDATION
152 <222> (38)...(38)
153 <223> When Xaa in position 38 is terminal amino acid in sequence,
154 terminal amino acid may or may not be amidated;
155 <220>
156 <221> VARIANT
157 <222> (5)...(28)
158 <223> provided that no more than three of Xaa in positions 5, 6,
159 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 24, 25, 26,
160 27 and 28 are Ala.
161 <400> 4
W--> 162 Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa 1
E--> 163
W--> 164 Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa 2
E--> 165
W--> 166 Xaa Xaa Xaa Xaa Xaa Xaa

*insert
hand
return*

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VERIFICATION SUMMARY
PATENT APPLICATION US/09/003,869A

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TIME: 13:27:50

Input Set: I003869A.RAW

Line	? Error/Warning	Original Text
162	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa X
163	E Invalid/Missing Amino Acid Numbering	
164	W "N" or "Xaa" used: Feature required	Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
165	E Invalid/Missing Amino Acid Numbering	
166	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa 35